### (12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

# (19) World Intellectual Property **Organization**

International Bureau





(43) International Publication Date 25 March 2004 (25.03.2004)

**PCT** 

(10) International Publication Number WO 2004/025461 A3

(51) International Patent Classification7:

G06F 9/52

(21) International Application Number:

PCT/EP2003/010082

(22) International Filing Date: 13 August 2003 (13.08.2003)

(25) Filing Language:

**English** 

(26) Publication Language:

**English** 

(30) Priority Data:

02368099.4

12 September 2002 (12.09.2002)

- (71) Applicant (for all designated States except MC, US): INTERNATIONAL BUSINESS MACHINES COR-PORATION [US/US]; New Orchard Road, Armonk, NY 10504 (US).
- (71) Applicant (for MC only): COMPAGNIE IBM FRANCE [FR/FR]; Tour Descartes, 2, Avenue Gambetta, F-92400 Courbevoie (FR).
- (72) Inventor; and
- (75) Inventor/Applicant (for US only): GIACOMELLO,

Mauro, Antonio [IT/IT]; Piazza Italia, 5, Cologno Monzese, I-2093 Milano (IT).

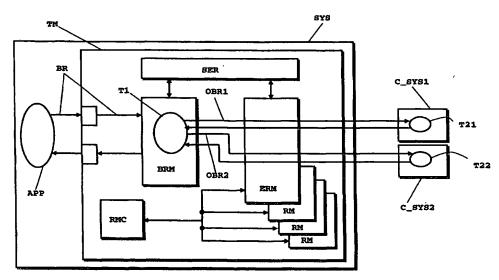
- (74) Agent: DE PENA, Alain; Compagnie IBM France, Direction de la Propriété Intellectuelle, F-06610 La Gaude (FR).
- (81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

#### Declaration under Rule 4.17:

of inventorship (Rule 4.17(iv)) for US only

[Continued on next page]

(54) Title: A DATA PROCESSING SYSTEM ADAPTED TO INTEGRATING NON-HOMOGENEOUS PROCESSES



(57) Abstract: A data processing system comprises at least one resource manager (RM) for managing changes to respective system resources in accordance to a commit/backout protocol, and a resource manager coordinator (RMC) for coordinate mit/backout activities of the at least one resource. tem resources in accordance to a commit/backout protocol, and a resource manager coordinator (RMC) for coordinating the commit/backout activities of the at least one resource manager. A process resource manager (ERM) is provided, coordinated by the resource manager coordinator according to the commit/backout protocol, for managing the execution of non-compliant processes not complying with the commit/backout protocol. The process resource manager automatically determines, upon receipt of a backout request, a sequence of compensation actions to be performed to backout actions performed during the execution of the secondary non-compliant processes, and managing the execution of said compensation actions.





#### Published:

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

(88) Date of publication of the international search report: 14 October 2004

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

#### INTERNATIONAL SEARCH REPORT

ational Application No		
/EI	/10082	

A. CLASSIFICATION OF SUBJECT MATTER IPC 7 G06F9/52

According to International Patent Classification (IPC) or to both national classification and IPC

#### B. FIELDS SEARCHED

 $\label{lem:minimum documentation searched (classification system followed by classification symbols) IPC \ 7 \ \ G06F$ 

Documentation searched other than minimum documentation to the extent that such documents are included. In the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, INSPEC, COMPENDEX, IBM-TDB

Category °	Citation of document, with Indication, where appropriate, of the relevant passages	Relevant to claim No.
X .	EP 0 969 363 A (MICROSOFT CORP) 5 January 2000 (2000-01-05)	1-7,11, 15,20, 22-24
	column 2, paragraph 6 column 3, paragraph 9	
	column 3, paragraph 10 column 4, paragraph 13	
	column 12, paragraph 37	
	column 12, paragraph 39 column 13, paragraph 40	·
	column 15, paragraph 47	
Y	column 15, paragraph 48 column 27, paragraph 95	8-10,
		12-14, 16-19
	<b>-/</b>	

X Further documents are listed in the continuation of box C.	X Patent family members are listed in annex.
Special categories of cited documents:      A' document defining the general state of the art which is not considered to be of particular relevance      E' earlier document but published on or after the international filing date      L' document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)      O' document referring to an oral disclosure, use, exhibition or other means      P' document published prior to the international filing date but later than the priority date claimed	<ul> <li>"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention</li> <li>"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone</li> <li>"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.</li> <li>"&amp;" document member of the same patent family</li> </ul>
Date of the actual completion of the international search  30 July 2004	Date of mailing of the international search report  11/08/2004
Name and mailing address of the ISA  European Patent Office, P.B. 5818 Patentlaan 2  NL - 2280 HV Rijswijk  Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,  Fax: (+31-70) 340-3016	Authorized officer  Ebert, W

## INTERNATIONAL SEARCH REPORT

	ational	Application No
!.	~ i	03/10082

		03/10082
	ation) DOCUMENTS CONSIDERED TO BE RELEVANT	
Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Υ	US 5 561 797 A (GILLES ROBERT A ET AL) 1 October 1996 (1996-10-01)  column 2, line 56 - line 66 column 3, line 7 - line 40 column 5, line 13 - line 37 column 6, line 30 - line 35 column 7, line 6 - line 45	1,8-10, 16-19, 23,24
Υ	US 6 094 688 A (GUPTA PRASHANT ET AL) 25 July 2000 (2000-07-25) column 2, line 23 - line 39 column 6, line 23 - line 32 column 7, line 46 - line 62 column 9, line 18 - line 33 column 10, line 23 - line 40	1,12-14, 23,24
Α	US 5 764 897 A (KHALIDI YOUSEF A) 9 June 1998 (1998-06-09) column 4, line 25 - line 36 column 10, line 35 - line 40	1-24

#### INTERNATIONAL SEARON INCLUSION

nformation on patent family members

03/10082 Patent document **Publication** Patent family Publication member(s) cited in search report date date EP 0969363 Α 05-01-2000 US 6526416 B1 25-02-2003 CA 2246908 A1 30-12-1999 0969363 A2 EP 05-01-2000 JP 2000020364 A 21-01-2000 US 5561797 Α 01-10-1996 EP 0616284 A2 21-09-1994 JP 2557192 B2 27-11-1996 JP 6301588 A 28-10-1994 US 6094688 Α 25-07-2000 US 5913061 A 15-06-1999 ΕP 1066564 A2 10-01-2001 JP 2002507017 T 05-03-2002 WO 9946661 A2 16-09-1999 US 6507875 B1 14-01-2003 0853277 A2 EP 15-07-1998 JP 10260825 A 29-09-1998 US 6745388 B1 01-06-2004 US 2003093479 A1 15-05-2003 US 5764897 Α 09-06-1998 DE 69429686 D1 14-03-2002 DE 69429686 T2 30-04-2003 EP 0613083 A2 31-08-1994

JP

7056866 A

national Application No

03-03-1995